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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,949	08/09/2001	Jan Zavada	D-0021.5C-1	9458

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EXAMINER

YAEN, CHRISTOPHER H

ART UNIT	PAPER NUMBER
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1642

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/807,949

Applicant(s)

ZAVADA ET AL.

Examiner

Christopher H Yaen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 27 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 20-27 and 31-44 is/are pending in the application.
- 4a) Of the above claim(s) 21-27, 43 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of group III in Paper No. 9 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 20-27 and 43-44 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 9. Applicant is reminded to cancel all non-elected claims.
3. Therefore, claims 31-42 are examined on the merits.

### ***Claim Rejections - 35 USC § 112***

4. Claims 31-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Regarding claims 31-42 in the recitation of the term "MN protein", the abbreviation of the protein name must be accompanied by the full name of the protein.
6. Regarding claim 31, 38,39,40 and dependent claims thereof in the recitation of the term "site", it is unclear from the specification as to which site is being referred. Furthermore, because it is not known where amongst the MN protein the identified molecule is to bind, the metes and bounds of the term cannot be determined.

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7. Regarding claim 31 and dependent claims thereof, it is not clear as to how the determination of molecules that bind to the "site" is to be determined because the necessary methods steps have not been recited.

8. Regarding claim 37 in the recitation of the phrase "abnormally expressed", it is considered a relative term of which the metes and bounds cannot be determined. To what extent of normal expression would normal become abnormal expression.

9. Regarding claim 31, 33, 37, and dependent claims thereof in the recitation of the term "inorganic molecule", it is unclear from the specification as to the metes and bounds of the term. Although it understood in general what the term is to mean, there are many types of inorganic molecules of which can be encompassed by this term.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 31, 32, 37, 38, 39, 40, 41, 42 are rejected under 35 U.S.C. 102(b) as being anticipated by Zavada *et al* (Int. J. Oncology 1997, 10(4):857-863). Claims are drawn to a method of identifying organic molecules that bind to specific sites on the MN protein through the a cell adhesion assay, wherein the molecule is an organic molecule, wherein the molecule inhibits growth of the cell, wherein the molecule binds to a site within the proteoglycan domain or within the carbonic anhydrase domain, wherein the site is selected from SEQ ID No: 10 and 97-106, and wherein the cells used to assay

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are human. Zavada *et al* teach the identification of an antibody to MN protein which is used to inhibit the binding of human derived cells in a cell adhesion assay. The antibody identified corresponds to an epitope that is located either in the proteoglycan domain or in the carbonic anhydrase domain.

***Claim Rejections - 35 USC § 102***

12. Claims 31, 32, 34-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Zavada *et al* (WO 95/34650). The claims are drawn to a method of identifying an organic molecule that binds to a specific site within the MN protein wherein the molecule is identified by using a cell adhesion assay. The claims are further limited to the organic molecule being proteins or peptides, wherein the peptides comprises a sequence selected from the group consisting of SEQ ID No: 107-109, and 137-138, wherein the organic molecules inhibit growth, wherein the site of the MN protein comprises an amino acid sequence selected from the group consisting of SEQ ID No: 10 and 97-106. Zavada *et al* teach a method of identifying peptides and antibodies that bind to the MN protein within either the carbonic anhydrase domain or within the proteoglycan domain, which is represented by SEQ ID No: 10 and 97-106 or 107-109 and 137-138. The claims are therefore anticipated.

***Claim Rejections - 35 USC § 102***

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

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(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

14. Claims 31-32, 34-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Zavada *et al* (US Patent No. 6,297,051). See above for the limitation of the claims.

Zavada *et al* teach the identification of peptides that bind to the MN protein within the sequences represented by SEQ ID No: 10, 97-106 and 107-108 and 137-138.

Furthermore, Zavada *et al* teach that such peptides are used in the inhibition of growth of tumor cells.

### ***Conclusion***

No claims are allowed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher H Yaen whose telephone number is 703-305-3586. The examiner can normally be reached on Monday-Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-305-3014 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Christopher Yaen  
Art Unit 1642  
February 6, 2003

  
ALI R. SALIMI  
PRIMARY EXAMINER